



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT U.S. Steel Gary Works HWD-5 and TTP Closure Plan Modifications

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The Indiana Department of Environmental Management (IDEM) has prepared this fact sheet to inform the public of U.S. Steel's proposed modifications to the Hazardous Waste Disposal Unit No. 5 (HWD-5) Closure Plan, approved on October 15, 2009, and the adjacent Terminal Treatment Plant (TTP) Area Closure Plan, approved on June 23, 2010. These modifications have been proposed with the intention of improving the landfill cap and associated surface water drainage.

Unit History

U.S. Steel is a fully integrated steel making plant located in Gary, Indiana. The facility occupies an area approximately seven miles long and approximately one mile wide. HWD-5 was used to dispose of wastes which include spent pickle liquor, mill sludge, terminal treatment plant (TTP) sludge, Electric Arc Furnace sludge, fuel oil sludge, waste oil and water, acid waste, batteries, asbestos, and lime. Hazardous waste disposal ceased at HWD-5 prior to August 8, 1988. An estimated waste volume of 261,500 cubic yards, in an area covering approximately 7.8 acres, was disposed in HWD-5.

The TTP Area is a non-hazardous disposal area located adjacent to the HWD-5 Disposal Unit. The TTP Area was previously used for disposal of Terminal Treatment Plant (TTP) sludge and final oil separator sludge generated at Gary Works. Waste disposal at the TTP Area began in 1986 and ceased after 1991. The TTP Area has an estimated waste volume of 192,000 cubic yards.

Proposed Modifications

1. Remove the geocomposite from the anchor trenches to reduce the potential for surface water to migrate along the geocomposite and infiltrate into the anchor trenches and underlying waste materials.
2. The GCL and geomembrane will be extrusion welded at their overlaps to reduce the potential for surface water to seep between the materials.
3. Extend the geosynthetics 5 feet beyond the landfill boundary and rebuild the perimeter roadway over the geosynthetics along the west side of HWD-5 to maintain access to HWD-5 and the TTP.
4. For both HWD-5 and the TTP Area, replace the PVC piping with high density polyethylene (HDPE) piping for the removal of surface water.
5. Install an HDPE drainage pipe embedded in a slag mound at the toe of the HWD-5 slope (4H:1V) to aid in the removal of surface water.
6. Replace the slag sand fill on the HWD-5 3H:1V and 4H:1V slopes with soil to provide drainage and help support the growth of vegetation.
7. Remove the TTP southern surface water discharge due to construction issues. The surface water collected at the southern location will be routed through a pipe that will be installed below the surface of the access road on the west side of TTP and connect with the surface water pipe at the northern area of the TTP.
8. Allow surface water run-off into shallow surface water swales constructed at HWD-5 and TTP, rather than (under the current closure plan) discharging outside the landfill boundary onto the ground.

Public Participation

The public comment period for this closure plan modification began on the date of the public notice, October 26, 2010, and ends on November 25, 2010. The official public notice was published on October 26, 2010, in the Post-Tribune, Merrillville, Indiana. Written comments with supporting documentation should be mailed to:

IDEM
Hazardous Waste Permits Section
100 North Senate Avenue
MC 66-20 RJ, IGCN 1101
Indianapolis, IN 46204-2251
Attention: Ruth A. Jean

Questions may be directed to Ruth Jean with IDEM's Solid and Hazardous Waste Permits Branch at (800) 451-6027 or rjean@idem.IN.gov.

For More Information

Copies of the closure plan modification proposal for HWD-5 and the TTP Area are available for public review at the Gary Public Library, 220 W. 5th Avenue, Gary, Indiana, and on IDEM's Virtual File Cabinet (VFC) at www.idem.IN.gov (document number 58865176). The HWD-5 approved closure plan is available on IDEM's VFC as the following document numbers: 33638201; 43897620; and 52035831. The TTP Area approved closure plan is also available on IDEM's VFC as the following document numbers: 45421688 and 58931681.